

**The Michigan Substance Abuse Risk  
and Protective Factors  
2000/2001 Student Survey:  
Upper Peninsula Region Results**

*Michigan Department  
of Community Health*



*John Engler, Governor  
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# **THE MICHIGAN SUBSTANCE ABUSE RISK AND PROTECTIVE FACTORS 2000/2001 STUDENT SURVEY: UPPER PENINSULA REGION RESULTS**

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# **1. INTRODUCTION AND METHODOLOGY**

In order to estimate the number and characteristics of middle and high school students in Michigan who are at elevated risk of alcohol, tobacco, and other drug use and related problems, or who are already substance users, the Michigan Department of Community Health (MDCH), Division of Mental Health Quality and Planning (DMHQP), with assistance from Research Triangle Institute (RTI), conducted the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey. This survey was funded by the Center for Substance Abuse Prevention (CSAP) as part of Michigan's Prevention Needs Assessment Project.

During the 2000 - 2001 school year, school staff administered the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey to over 9,000 students in grades 6, 8, 10, and 12, in 73 schools across Michigan.

To present the data and information from this study in a meaningful manner, we prepared an individual report for each of the seven regions in Michigan. Because of the small number of private school students participating in the survey, each regional report focuses on the findings from data collected from public school students. This report presents the results of the public school survey in the Upper Peninsula region and is divided into four chapters. The remaining sections of this chapter provide information on study methodology and response rates. The second chapter provides prevalence estimates of Upper Peninsula region public school students' use of tobacco, alcohol, and other drugs, as well as estimates of delinquent behavior. It should be noted that where estimates are compared in this report, no formal statistical analyses have been conducted. Chapter 3 provides findings about community, school, family, and peer-individual risk factors associated with students' substance use, and Chapter 4 summarizes the key study findings. In addition, the instrument and data collection materials are provided in the appendix.

## **1.1 Methodology**

The Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey was adapted from the Student Survey of Risk and Protective Factors and Prevalence of Alcohol, Tobacco, and other Drug Use, developed by the Social Development Research Group (SDRG) at the University of Washington and used in many other states. The survey was printed on an electronically scannable form. To protect student privacy, the questionnaire was anonymous. It is therefore impossible to identify an individual student's responses. District and school recruitment was conducted by staff of MDCH. Participation by schools and students was completely voluntary. Parental consent was obtained prior to survey administration by using either active or passive consent procedures. Participating schools were provided all the



necessary materials for administering the survey. A designated survey coordinator at each school distributed and collected survey materials and sent the completed surveys back to RTI via Federal Express. A thank you letter was sent by MDCH to participating school superintendents, principals, and teachers expressing appreciation to all involved in the survey. The letter provided instructions on how to receive the incentive for participating.

Because this research effort involved data collection directly from minors, it involved review of the study design and all school and parental consent forms and procedures by the MDCH Human Subjects Committee. Approval was granted as required before data collection began.

## **1.2 Response Rates**

The following information is for the **Upper Peninsula region** and is based on the surveys completed by participating students in grades 6, 8, 10, and 12. **Exhibit 1.1** displays the planning regions in the state. **Exhibit 1.2** shows that 21 schools were sampled from the Upper Peninsula region and all 21 schools were eligible to participate. Schools were eligible if they included a 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, and/or 12<sup>th</sup> grade. Of the 21 eligible schools, 12 participated in the survey for an overall school response rate of 57 percent. The school response rate in the Upper Peninsula region was lower than the statewide public school response rate of 69 percent. Within the 12 participating Upper Peninsula region public schools, 18 6<sup>th</sup> grade, 19 8<sup>th</sup> grade, 14 10<sup>th</sup> grade, and 16 12<sup>th</sup> grade classes completed the survey.

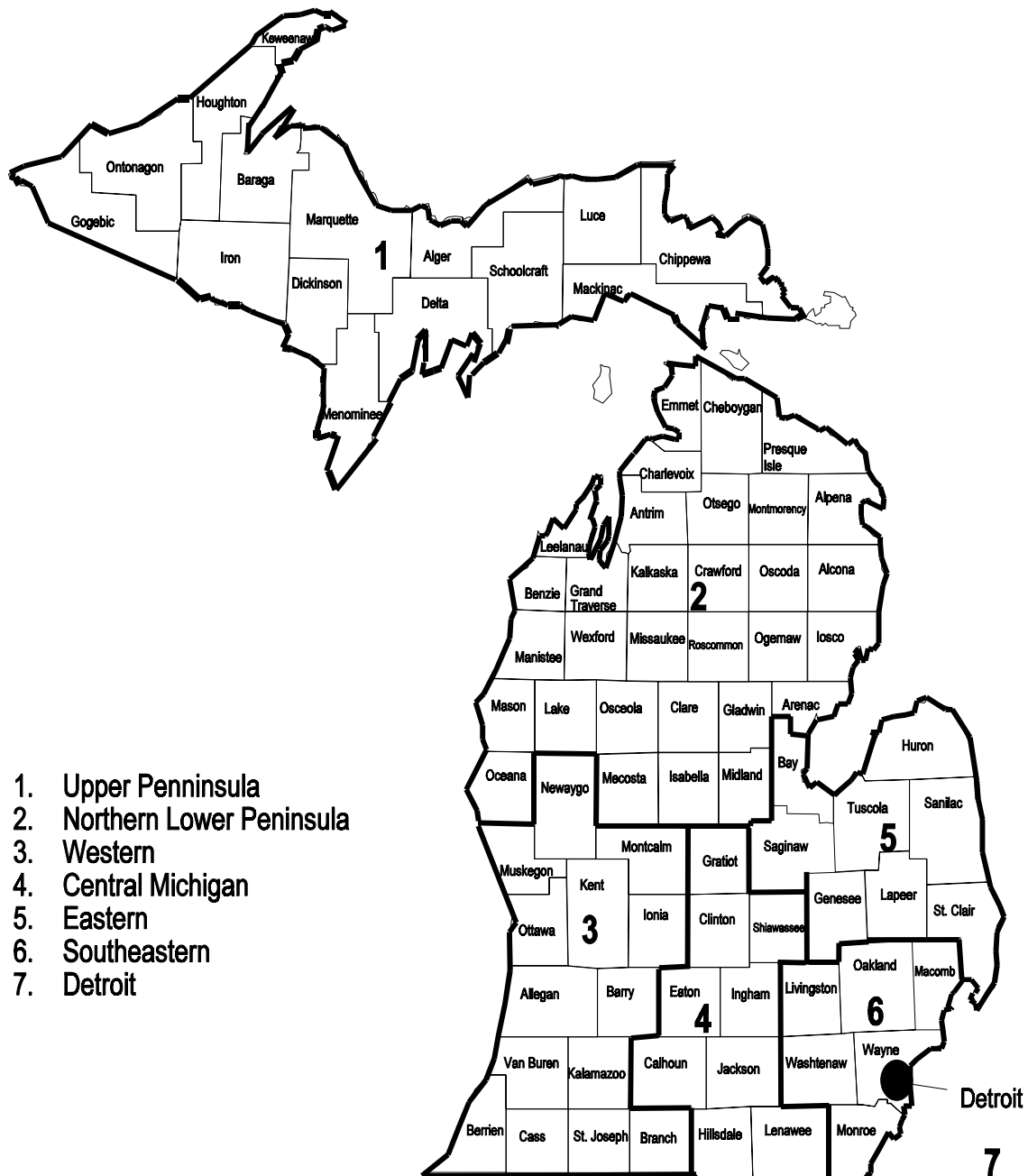
A total of 1,779 Upper Peninsula region public school students were sampled, but 10 of these students were ineligible to participate because they were not in the 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, or 12<sup>th</sup> grade (**Exhibit 1.2**). In addition, 52 eligible students did not participate because their parents/guardians objected to their participation, 22 eligible students refused to participate, and 186 were absent on the day of survey administration. Of the completed surveys, 74 were unusable due to careless, invalid, or logically inconsistent responses. As a result, there were 1,435 valid surveys, including 256 6<sup>th</sup> grade surveys, 361 8<sup>th</sup> grade surveys, 454 10<sup>th</sup> grade surveys, and 364 12<sup>th</sup> grade surveys. The overall student response rate for the Upper Peninsula region was 81 percent. The student response rate in the Upper Peninsula region was slightly higher than the statewide public school student response rate of 78 percent.

Taking into consideration both the school and student response rates [school response rate\*student response rate/100], **Exhibit 1.2** shows the overall response rate for the Upper Peninsula region was 46 percent. The overall response rate for public schools in the Upper Peninsula region was lower than the overall statewide public school response rate of 54 percent.

## **1.3 Using the Survey Results**

Results from the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey provide important information that can be used to help detect current patterns of risk factors among students. It can help you:

# Exhibit 1.1 Michigan Department of Community Health Substance Abuse Planning Regions by County



## Exhibit 1.2 School and Student Response Rates for Public Schools in the Upper Peninsula Region

	Upper Peninsula Region	Statewide
<b>School:</b>		
# Schools Sampled	21	95
# Schools Eligible	21	84
# Schools Participating	12	58
<b>Response Rate<sup>1</sup></b>	57%	69%
<b>Classes:</b>		
# 6 <sup>th</sup> Grades Participating	18	78
# 8 <sup>th</sup> Grades Participating	19	128
# 10 <sup>th</sup> Grades Participating	14	104
# 12 <sup>th</sup> Grades Participating	16	77
<b>Student:</b>		
# Students Sampled	1,779	11,822
# Students Eligible <sup>2</sup>	1,769	11,442
# Parental Refusals	52	284
# Student Refusals	22	302
# Absent	186	1558
# Discarded Surveys <sup>3</sup>	74	386
# Valid Surveys	1,435	8,912
# 6 <sup>th</sup> Grade Surveys	256	1,729
# 8 <sup>th</sup> Grade Surveys	361	2,578
# 10 <sup>th</sup> Grade Surveys	454	2,548
# 12 <sup>th</sup> Grade Surveys	364	2,057
<b>Response Rate<sup>4</sup></b>	81%	78%
<b>Overall:</b>		
<b>Response Rate<sup>5</sup></b>	46%	54%

<sup>1</sup> School response rate is calculated by dividing the number of participating schools by the number of eligible schools.

<sup>2</sup> Students in grades 7, 9, and 11 who completed the survey were ineligible for the survey and are therefore excluded from analysis and response rate calculations.

<sup>3</sup> Includes surveys in which responses were deemed dishonest or unreliable.

<sup>4</sup> Student response rate is calculated by dividing the number of valid surveys by the number of eligible students.

<sup>5</sup> The overall response rate is calculated by multiplying the school and student response rates.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

- ! identify differences by grade and gender,
- ! target prevention efforts to specific groups of students, and
- ! suggest whether or not policies and programs are having their intended effect on student behaviors.

The results can be used as a tool for starting discussions, educating the community, and planning and evaluating programs.

- ! **Starting the Conversation:** Use the survey findings to begin a conversation with young people about the personal choices they make or about the health of their community. Ask them if the results accurately reflect what they see happening around them. How do they explain the results? What ideas do they have about ways to promote healthy behaviors? From their perspective, what seems to be working and what is not working?
- ! **Increasing Awareness:** The Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey provides an opportunity to break through “denial” about some students’ participation in risky behaviors, and to make community members aware of the risks that their young people face. It can also dispel myths and correct misinformation about the average teen. The survey can be used to accentuate the positive and to celebrate the fact that many students are abstaining from behaviors which endanger their health and their ability to succeed.
- ! **Planning and Evaluating Programs:** The Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey can serve as the basis of a regional needs assessment. It can help identify both strengths and areas for improvement in your region. It can even suggest strategies to address those challenges.

## 1.4 Limitations of the Survey

While the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey represents the most complete and most recent information available about risk behaviors among students in your region, like all surveys it has some limitations that you should keep in mind when interpreting the results.

- ! **Sampling and Data Quality:** This report is based on all the students who completed the survey in the Upper Peninsula region. Some students were absent on the day the survey was administered, and other students declined to participate or incorrectly completed the survey. It is likely that the results are representative of the student population in your region, but we cannot be sure. To minimize the chances of poor data quality, several precautions were taken to ensure the reliability and validity of the results. First, the questionnaire has been carefully designed and thoroughly tested by SDRG. Second, the survey was anonymous to encourage students to be honest and forthright. Third, several consistency checks

were run on the data to exclude careless, invalid, or logically inconsistent answers. These precautions can reduce most, but not all, sources of error.

- ! **What, not Why:** The Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey can indicate what students are doing. It also can suggest the groups of students who are more likely to engage in these behaviors, which can aid in designing prevention programs targeted at the students most at risk. However, the survey does not address another important piece of the puzzle: *Why* are students engaging in these behaviors? That question is beyond the scope of this report.

## 1.5 Understanding this Report

The results of the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey are presented as data Exhibits. All results are expressed as percentages of students who made the responses being reported. Some percentages may not sum to 100 percent due to rounding.

Please note that we encourage you to examine not only the areas for improvement identified in this survey, but also the regional strengths that are revealed. That is, in most cases the majority of adolescents are NOT engaging in risky behaviors. Although most of the Exhibits are oriented to examining the prevalence of risk behaviors, please do not forget about the percent of adolescents in the Upper Peninsula region who are NOT engaging in the behavior.

## **2. PREVALENCE OF SUBSTANCE USE AND DELINQUENT BEHAVIOR AMONG MICHIGAN PUBLIC SCHOOL STUDENTS IN THE UPPER PENINSULA REGION**

This chapter presents information about the use of tobacco, alcohol, and other drugs (ATOD) and participation in delinquent behavior among 6<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade public school students in the Upper Peninsula region of Michigan. To determine the characteristics of students who engage in these behaviors, this chapter presents prevalence estimates separately by students' gender, race/ethnicity, and grade in school whenever the data permit. The available demographic information may be useful in helping to identify groups for targeted prevention efforts. It should be noted that for some demographic subgroups either the number of students in the Upper Peninsula region was too small or the prevalence of some behaviors was too low to obtain a reliable estimate. In addition to presenting information about the Upper Peninsula region, where possible results from the region are compared to the state average to indicate areas that may be of special concern. As noted in Chapter 1, comparisons in this report refer to apparent differences only, and no statistical calculations have been performed.

### **2.1 Tobacco**

#### **2.1.1 Lifetime Tobacco Use**

As shown in **Exhibit 2.1**, about 50 percent of Michigan public school students in the Upper Peninsula region had ever used tobacco (i.e., either cigarettes or smokeless tobacco). Some differences in lifetime tobacco use based demographic characteristics were observed. Specifically, use was slightly higher among males than females (51% vs. 48%). In addition, students of non-White, non-African-American races/ethnicities were more likely to have used tobacco than White students (54% vs. 49%). Finally, higher grade levels were associated with an increased prevalence of tobacco use. The highest prevalence rate (70%) occurred for students in 12<sup>th</sup> grade; use was intermediate among 10<sup>th</sup> grade students (61%) and 8<sup>th</sup> graders (49%), and lowest among 6<sup>th</sup> graders (21%). It should be noted that even among the youngest students included in the survey, more than one in five had used tobacco in their lifetime.

The overall level of lifetime tobacco use in the Upper Peninsula region was higher than the statewide average of 41 percent. The higher rates of tobacco use among Upper Peninsula region students applied to each of the demographic subgroups for which a reliable estimate was obtained. The differences were especially notable among males (51% Upper Peninsula region vs. 41% state), students of non-White, non-African-American races/ethnicities (54% Upper Peninsula region vs. 34% state), 6<sup>th</sup> graders (21% Upper Peninsula region vs. 13% state), and 8<sup>th</sup> graders (49% Upper Peninsula region vs. 38% state).

**Exhibit 2.1 Prevalence of Tobacco Use in the Lifetime and Past Month Among Public School Students in the Upper Peninsula Region and the State, by Selected Demographic Characteristics: 2000/2001**

Demographic Characteristic	Lifetime		Past Month	
	Region	State	Region	State
<b>Total</b>	49.5	41.4	23.7	19.2
<b>Gender</b>				
Male	50.7	41.2	24.0	19.7
Female	48.2	41.9	23.2	18.9
<b>Race/Ethnicity</b>				
White	49.0	43.4	23.3	21.4
Black or African-American	+	35.5	+	9.8
Other races <sup>1</sup>	54.0	34.2	29.4	15.5
<b>Grade in School</b>				
6 <sup>th</sup>	20.8	12.6	+	2.3
8 <sup>th</sup>	49.3	38.0	19.7	14.0
10 <sup>th</sup>	60.5	54.6	31.4	27.6
12 <sup>th</sup>	69.8	65.1	41.6	36.5

+ Estimate suppressed because of low precision.

<sup>1</sup> Includes Hispanics or Latinos, American Indians or Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders, or Arab Americans or Chaldeans.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.



### **2.1.2 Past-Month Tobacco Use**

Approximately 24 percent of students in the Upper Peninsula region had used tobacco in the 30 days prior to the survey (i.e., they were current tobacco users) (**Exhibit 2.1**). Unlike lifetime use, males and females were equally likely to be current tobacco users. The findings for race/ethnicity and grade in school were similar to lifetime tobacco use, though. Students of non-White, non-African-American races/ethnicities were more likely than White students to be current tobacco users (29% vs. 23%). Although estimates for past month tobacco use were unreliable for 6<sup>th</sup> graders, use was more common among seniors (42%) than among sophomores (31%) or 8<sup>th</sup> graders (20%).

The Upper Peninsula region prevalence of past month tobacco use was higher than the statewide prevalence (19%). Where comparisons among demographic groups were possible, current tobacco use was consistently higher in the Upper Peninsula region than in the state as a whole.

## **2.2 Alcohol**

### **2.2.1 Lifetime Alcohol Use**

To assess lifetime alcohol use, students were asked whether they had ever had a drink of alcohol in their life, beyond just a few sips. **Exhibit 2.2** shows that 58 percent of the students in the Upper Peninsula region reported lifetime use of alcohol. An examination of demographic differences in the Upper Peninsula region showed that males and females were equally likely to have used alcohol. Lifetime alcohol use was somewhat higher among non-White, non-African-American students (62%) than among White students (58%). We also found notable increases in lifetime alcohol use as students' grade in school increased. The greatest difference was between 6<sup>th</sup> graders and 8<sup>th</sup> graders, where prevalence increased from 22 percent to 60 percent. Another large increase was seen among 10<sup>th</sup> graders (73%), and a somewhat smaller increase among 12<sup>th</sup> graders (80%). It is notable that 6 in 10 students in the Upper Peninsula region had used alcohol by their 8<sup>th</sup> grade year.

The prevalence of lifetime alcohol use by students in the Upper Peninsula region is somewhat higher than the state as a whole (58% and 54%, respectively). This pattern held true for each of the demographic subgroups for which a reliable estimate was available. The differences were especially notable among students of non-White, non-African-American races/ethnicities (62% Upper Peninsula region vs. 46% state) and 8<sup>th</sup> graders (60% Upper Peninsula region vs. 51% state).

**Exhibit 2.2 Prevalence of Alcohol Use in the Lifetime and Past Month Among Public School Students in the Upper Peninsula Region and the State, by Selected Demographic Characteristics: 2000/2001**

Demographic Characteristic	Lifetime		Past Month	
	Region	State	Region	State
<b>Total</b>	58.4	54.4	36.5	31.0
<b>Gender</b>				
Male	58.1	54.6	37.5	31.3
Female	58.7	54.4	35.7	30.7
<b>Race/Ethnicity</b>				
White	58.2	57.4	36.4	33.9
Black or African-American	+	45.8	+	20.6
Other races <sup>1</sup>	61.8	46.3	38.9	24.5
<b>Grade in School</b>				
6 <sup>th</sup>	21.9	19.3	+	5.7
8 <sup>th</sup>	60.2	50.6	37.4	25.0
10 <sup>th</sup>	73.1	71.5	46.7	43.6
12 <sup>th</sup>	79.9	80.9	55.7	54.1

+ Estimate suppressed because of low precision.

<sup>1</sup> Includes Hispanics or Latinos, American Indians or Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders, or Arab Americans or Chaldeans.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

### **2.2.2 Past-Month Alcohol Use**

As shown in **Exhibit 2.2**, 37 percent of public school students in the Upper Peninsula region had consumed at least one drink in the month prior to the 2000/2001 survey (i.e., currently used alcohol). Differences based on gender and race/ethnicity were not great. As was the case with lifetime alcohol use, rates for current use increased with students' grade, from 37 percent of 8<sup>th</sup> graders, to 47 percent of 10<sup>th</sup> graders, to 56 percent of 12<sup>th</sup> graders.

The overall prevalence of past month alcohol use by students in the Upper Peninsula region was higher than the state average (37% and 31%, respectively). This pattern held for each of the demographic subgroups for which a reliable estimate was available. Differences were especially notable for non-White, non-African-American students (39% Upper Peninsula region vs. 25% state) and 8<sup>th</sup> graders (37% Upper Peninsula region vs. 25% state).

## **2.3 Other Drugs**

### **2.3.1 Lifetime Other Drug Use**

Illicit drug use was less prevalent than alcohol or tobacco use among Upper Peninsula region's public school students. Approximately 33 percent of students in the Upper Peninsula region reported having used at least one illicit drug in their lifetime (**Exhibit 2.3**). Illicit drug use was equally common among males and females. Use was higher among non-White, non-African-American students (38%) than among White students (33%). There was a notable difference between 8<sup>th</sup> graders (29%), 10<sup>th</sup> graders (41%), and 12<sup>th</sup> graders (51%).

As in the Upper Peninsula region, in the state as a whole one-third of students reported use of illicit drugs in their lifetime. Differences between demographic subgroups in the Upper Peninsula region compared to the state were not large. The greatest difference was for non-White, non-African-American students, among whom use was higher in the Upper Peninsula region than in the state as a whole (38% vs. 30%).

We also examined what types of illicit drugs were being used by Michigan's public school students (**Exhibit 2.4**). The most frequently used illicit drug in the Upper Peninsula region was marijuana (23%), followed by inhalants (15%), speed or amphetamines (9%), LSD or other psychedelics (6%), and cocaine (5%). These findings are similar to those reported across the state.

**Exhibit 2.3 Prevalence of Illicit Drug Use in the Lifetime and Past Month Among Public School Students in the Upper Peninsula Region and the State, by Selected Demographic Characteristics: 2000/2001**

Demographic Characteristic	Lifetime		Past Month	
	Region	State	Region	State
<b>Total</b>	33.1	33.3	19.0	17.2
<b>Gender</b>				
Male	33.2	35.2	20.3	18.6
Female	33.1	31.7	18.0	16.0
<b>Race/Ethnicity</b>				
White	32.7	34.1	18.7	17.8
Black or African American	+	32.2	+	15.4
Other races <sup>1</sup>	37.5	29.5	24.0	15.9
<b>Grade in School</b>				
6 <sup>th</sup>	+	10.8	+	3.2
8 <sup>th</sup>	28.5	30.2	18.8	15.5
10 <sup>th</sup>	41.2	42.7	24.0	24.7
12 <sup>th</sup>	51.1	51.7	28.5	26.1

+ Estimate suppressed because of low precision.

<sup>1</sup>Includes Hispanics or Latinos, American Indians or Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders, or Arab Americans or Chaldeans.

Note: Illicit Drug Use includes use of marijuana, inhalants, cocaine, LSD or other psychedelics, speed or amphetamines, or other illegal drugs.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 2.4 Prevalence of Specific Types of Illicit Drug Use in the Lifetime and Past Month Among Public School Students in the Upper Peninsula Region and the State: 2000/2001**

Substance Used	Lifetime		Past Month	
	Region	State	Region	State
<b>Marijuana</b>	23.3	24.0	13.3	12.6
<b>Inhalants</b>	14.7	13.6	5.3	3.9
<b>Cocaine</b>	5.2	3.3	+	1.1
<b>LSD or Other Psychedelics</b>	6.0	5.0	+	2.4
<b>Speed or Amphetamines</b>	9.0	4.9	3.8	1.7
<b>Heroin</b>	+	0.9	+	+
<b>Tranquilizers</b>	5.4	4.7	2.9	2.0
<b>Barbiturates</b>	+	2.7	+	1.2
<b>Designer drugs<sup>1</sup></b>	4.7	5.0	+	1.8
<b>Steroids</b>	+	1.4	+	+

+ Estimate suppressed because of low precision.

<sup>1</sup>Includes GHB, ecstasy (X), or Ketamine (Special K).

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey

### **2.3.2 Past-Month Other Drug Use**

Approximately 19 percent of students in the Upper Peninsula region reported using an illicit drug in the 30 days prior to the survey (**Exhibit 2.3**). Males were slightly more likely to report use than females (20% vs. 18%). Use was more common among non-White, non-African-American students (24%) than among White students (19%). There were increases in past month other drug use between 8<sup>th</sup> graders (19%), 10<sup>th</sup> graders (24%), and 12<sup>th</sup> graders (29%).

The overall prevalence of past month illicit drug use by students in the Upper Peninsula region was slightly higher than that of students in the state (17%). Demographic subgroups in the Upper Peninsula region generally showed slightly higher rates than the corresponding subgroups across the state. The largest difference was for non-White, non-African-American students (24% Upper Peninsula region vs. 16% state).

Marijuana, inhalants, and speed or amphetamines were the only substances for which reliable regional estimates of past month use were obtained. Approximately 13 percent of students in the Upper Peninsula region reported past month marijuana use, a figure consistent

with the state average. About 5 percent of Upper Peninsula region students had used inhalants in the past month, and 4 percent had used speed or amphetamines. These percentages are similar to the state averages.

## **2.4 Combinations of Substances Used**

In addition to investigating individual substances used, we examined the prevalence of multiple substance use. **Exhibit 2.5** shows combination drug use for lifetime and past month. Please note that when referring to the “lifetime” columns the rows refer to lifetime use, and when referring to the “past month” columns the rows refer to past month use.

### **2.4.1 Lifetime Combination Drug Use**

We found that, among substance users, the use of more than one substance was common. Most of the students who had smoked cigarettes in their lifetime also had used alcohol (88%), whereas 47 percent had smoked marijuana and 44 percent had used other illicit drugs. Among those who had used alcohol, 70 percent also had smoked cigarettes, 39 percent had smoked marijuana, and 37 percent had used other illicit drugs. Students who had ever smoked marijuana were likely to have used cigarettes (93%), alcohol (97%), or other illicit drugs (63%). Finally, among students who had ever used illicit drugs other than marijuana, 84 percent had smoked cigarettes, 91 percent had used alcohol, and 62 percent had smoked marijuana.

### **2.4.2 Past Month Combination Drug Use**

As was the case with lifetime use, if students had used one substance in the past month they were fairly likely to have used another one too. Students who had smoked cigarettes in the past month had relatively high levels of past month alcohol (84%), marijuana (46%), and other illicit drug (34%) use. Among those who had used alcohol, 49 percent had smoked cigarettes, 32 percent had smoked marijuana, and 25 percent had used other illicit drugs. Students who had smoked marijuana in the past month were likely also to have used cigarettes (75%), alcohol (88%), and other illicit drugs (49%). Among past month other illicit drug users, past month cigarette use was 63 percent, alcohol use was 78 percent, and marijuana use was 55 percent.

## **2.5 Peer Perceptions of Use and Perceived Risk of Use**

### **2.5.1 Peer Perceptions**

To determine the effect of peers’ opinions on students’ substance use, respondents were asked about the chances that they would be seen as “cool” if they used cigarettes, alcohol, or marijuana. **Exhibit 2.6** illustrates that the majority of students in the Upper Peninsula region reported that there was “some, little, or no chance” that using these substances would influence

**Exhibit 2.5 Combinations of Substances Used in the Lifetime and Past Month Among Michigan Public School Students in the Upper Peninsula Region: 2000/2001**

	Lifetime Use				Past Month Use			
	Cigarettes	Alcohol	Marijuana	Other Illicit Drugs	Cigarettes	Alcohol	Marijuana	Other Illicit Drugs <sup>1</sup>
<b>Cigarettes</b>	100.0	88.1	46.9	43.6	100.0	84.4	46.4	34.4
<b>Alcohol</b>	70.4	100.0	38.9	37.1	49.4	100.0	31.9	25.1
<b>Marijuana</b>	93.0	96.5	100.0	63.1	74.7	88.3	100.0	48.9
<b>Other Illicit Drugs</b>	84.4	90.6	62.4	100.0	63.0	78.1	54.7	100.0

<sup>1</sup>Includes inhalants, cocaine, LSD or other psychedelics, speed or amphetamines, heroin, tranquilizers, barbiturates, design drugs (GHB, ecstasy [X], or Ketamine [Special K]), and steroids.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 2.6 Prevalence of Lifetime and Past Month Use of Cigarettes, Alcohol, and Marijuana Among Michigan Public School Students in the Upper Peninsula Region, by Peer Perception of Use and the Perceived Risk of Use: 2000/2001**

	Lifetime Use				Past Month Use		
	N	Cigarettes	Alcohol	Marijuana	Cigarettes	Alcohol	Marijuana
<b>What are the chances you would be seen as cool if you:</b>							
Smoked cigarettes							
very or pretty good chance	104	73.6	73.1	36.0	44.8	43.8	+
some, little, or no chance	1,308	44.3	57.4	22.4	19.7	35.9	12.5
Drank alcohol regularly <sup>1</sup>							
very or pretty good chance	241	69.1	83.9	37.4	36.2	60.9	21.3
some, little, or no chance	1,171	42.2	53.8	20.7	18.8	32.0	11.8
Smoked marijuana							
very or pretty good chance	143	73.7	79.9	55.4	38.6	53.8	36.1
some, little, or no chance	1,273	43.5	56.3	20.0	19.6	34.8	10.8
<b>How much do you think people risk harming themselves (physically or in other ways) if they:</b>							
Smoke cigarettes							
great risk	918	37.1	52.2	18.9	14.1	30.2	10.4
moderate risk	366	65.3	71.5	33.0	33.2	49.3	19.2
slight or no risk	126	65.2	68.8	29.1	42.3	49.8	+
Drink alcohol regularly <sup>2</sup>							
great risk	485	33.8	43.2	15.4	13.8	21.9	8.2
moderate risk	498	49.0	60.7	23.3	20.5	36.4	12.3
slight or no risk	425	57.8	74.2	32.6	31.6	54.1	20.1
Smoke marijuana regularly							
great risk	946	33.8	47.6	8.3	10.7	24.1	+
moderate risk	249	72.2	80.8	48.5	36.9	58.1	26.2
slight or no risk	213	77.1	85.3	68.4	56.1	72.9	48.9

<sup>1</sup>At least once or twice a month.

<sup>2</sup>One or two drinks nearly every day.

<sup>+</sup>Data suppressed due to low precision.



Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

their peers' perceptions of them. There was a notable difference in substance use between students who thought using substances would make them appear "cooler" and those who did not. Specifically, those who thought substance use would enhance their image were more likely to use alcohol, cigarettes, and marijuana. It is interesting to note that the association between peer opinions and substance use was not specific to a given substance. For example, students who reported that they would be seen as cool if they drank alcohol were more likely not only to drink alcohol, but also to smoke cigarettes and marijuana. This finding also applied to peer perceptions about alcohol and marijuana, and held true for both lifetime and past month substance use (where comparisons were possible).

### **2.5.2 Perceived Risk**

Students were asked how much people risk harming themselves (physically or in other ways) if they smoke cigarettes, drink alcohol regularly, or smoke marijuana regularly. The findings are presented in **Exhibit 2.6**. For alcohol and marijuana, greater perceived risk was associated with less substance use. For cigarettes, the pattern was slightly different in that moderate perceived risk was associated with higher lifetime use than the perception of slight or no risk. Again, the association was not substance-specific; the patterns of perception of one substance applied to the use of all three. Past month use of all three substances was lower with greater perceived risk.

## **2.6 Delinquent Behavior**

**Exhibit 2.7** shows the prevalence by gender, race/ethnicity, and grade of five delinquent behaviors: being drunk or high at school, being suspended from school, stealing or attempting to steal a motor vehicle, selling illegal drugs, and having been arrested.

**Drunk or High at School.** Overall, 14 percent of public school students in the Upper Peninsula region reported having been drunk or high at school in the year prior to the survey. Males (15%) were somewhat more likely than females (12%) to report this behavior. Having been drunk or high at school also was more common among seniors (24%) and sophomores (21%) than among 8<sup>th</sup> graders (9%).

**Suspended from School.** Approximately 10 percent of students in the Upper Peninsula region reported having been suspended from school in the year prior to the survey. Males (15%) were more likely than females (6%) to have been suspended. Suspension was slightly less common among 12<sup>th</sup> graders (9%) than among 8<sup>th</sup> or 10<sup>th</sup> graders (12%).

**Sold or Tried to Steal a Motor Vehicle.** Very few students reported actual or attempted theft of a vehicle. As a result, no reliable prevalence estimates are available.

**Exhibit 2.7 Prevalence of Delinquent Behavior in the Past Year Among Public School Students in the Upper Peninsula  
Region: 2000/2001**

	Gender		Race/Ethnicity			Grade				Total
	Male	Female	White	Black or African American	Other Races <sup>1</sup>	6	8	10	12	
<b>Drunk or high at school</b>	14.9	12.4	13.7	+	+	+	8.8	20.8	24.2	13.6
<b>Suspended from school</b>	14.8	5.8	9.4	+	+	+	12.0	12.0	9.4	10.1
<b>Stole or tried to steal a motor vehicle</b>	+	+	+	+	+	+	+	+	+	+
<b>Sold illegal drugs</b>	8.0	4.7	6.0	+	+	+	+	8.4	11.7	6.4
<b>Been arrested</b>	5.8	+	4.4	+	+	+	+	+	8.4	4.5

+ Estimate suppressed because of low precision.

<sup>1</sup>Includes Hispanics or Latinos, American Indians or Alaskan Natives, Asians, Native Hawaiians or other Pacific Islanders, or Arab Americans or Chaldeans.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Sold Illegal Drugs.** Overall, 6 percent of students in the Upper Peninsula region reported that they had sold illegal drugs in the year prior to the survey. This behavior was somewhat more common among males (8%) compared to females (5%), and among seniors (12%) compared to sophomores (8%).

**Been Arrested.** About 5 percent of students reported that they had been arrested in the past year. Few reliable prevalence estimates for demographic subgroups are available.

## 2.7 Summary

The most commonly used substances among public school students in the Upper Peninsula region were alcohol, cigarettes, and marijuana. The majority (58%) had used alcohol in their lifetime, and more than one-third had used it in the month before the survey. Recent tobacco use was reported by 24 percent of students and recent marijuana use by 13 percent.

Two demographic differences in substance use were consistently found. First, non-White, non-African-American students were more likely to use substances than their White counterparts. This pattern held for lifetime and past month tobacco use, lifetime alcohol use, and lifetime and past month illicit drug use. Second, substance use consistently increased as students' grade in school increased.

When compared to students across the state, students in the Upper Peninsula region reported slightly higher levels of alcohol, tobacco, and recent illicit drug use, and similar levels of lifetime illicit drug use.

Among students who used substances, multiple substance use was fairly common. This was true for both lifetime and past month use.

Most students reported that using cigarettes, alcohol, or marijuana was unlikely to make them appear “cooler” to their peers. Those who did think substance use would enhance their image were more likely to use substances. It is notable that the association between peer opinions and substance use was not specific to a given substance; instead, students who reported that they would be seen as cool if they used one substance were more likely to report use of other substances too.

Moving beyond substance use, the prevalence of some delinquent behaviors in the past year was also assessed. Approximately 14 percent of students in the Upper Peninsula region reported having been drunk or high at school, 10 percent reported having been suspended from school, 6 percent reported having sold illegal drugs, and 5 percent had been arrested.

Overall, the data presented in this chapter provide basic prevalence information about alcohol and other drug use and delinquent behaviors for public school students in the Upper

Peninsula region of Michigan and offer insights into the groups most likely to experience substance use problems. When considering the information in this chapter, the limitations should be kept in mind. As noted previously, information for some demographic subgroups is unavailable due to low precision in the data or low prevalence of the behavior among those groups. In addition, the results are based on students' self-reports, and may not reflect their substance use with complete accuracy. Another important consideration involves the implications of any data collected in a school setting; students problematically involved with substance use may be less likely to attend school, and as a result considerable caution should be used when extrapolating the results to the entire adolescent population in the Upper Peninsula region of Michigan.

### **3. RISK AND PROTECTIVE FACTORS FOR ADOLESCENT HEALTH BEHAVIORS AMONG MICHIGAN PUBLIC SCHOOL STUDENTS IN THE UPPER PENINSULA REGION**

#### **3.1 Background**

The risk and protective factor framework has assumed a prominent role in substance abuse prevention research and practice over the past two decades. In 1979, Dr.'s J. David Hawkins and Richard F. Catalano, of the Social Development Research Group (SDRG), began developing the Social Development Strategy which has identified a set of risk and protective factors that influence behaviors.

Risk factors are characteristics of individuals or their environment that, when present, increase the likelihood that individuals will develop a disorder (e.g., use drugs) (Garmezy, 1983). Protective factors are characteristics that may reduce one's susceptibility to risk or prevent the initial occurrence of a risk factor (Coie et al., 1993). SDRG research has shown that certain conditions in a child's community, school, family and peer environments, as well as physiological and personality traits of the child, are common risk factors for problems such as drug abuse, delinquency, teenage pregnancy, and school failure. Because risk factors are precursors to substance abuse behaviors, reducing risk factors or protecting against them can prevent the occurrence of such behaviors. The Social Development Strategy emphasizes two key protective factors, including (1) bonding to prosocial family, school and peers, and (2) clear standards or norms for behavior. Three processes promote these protective factors: (1) opportunities for involvement in productive prosocial roles, (2) skills to be successfully involved in these roles, and (3) consistent systems of recognition and reinforcement for prosocial involvement. These factors protect against the development of conduct problems, school misbehavior, truancy, and drug abuse. Therefore, risk-focused approaches to substance abuse prevention seek to reduce risk factors for substance abuse and enhance protective factors.

The risk and protective factors identified above are found at multiple levels, including the individual, the family, the peer group, the school, and the community (Hawkins, Catalano, & Miller, 1992; Kandel, Simcha-Fagan, & Davies, 1986; Newcomb & Felix-Ortiz, 1992). Persons exposed to multiple risk factors, and across multiple levels, are more likely to engage in substance use than those with fewer risk factors and/or fewer levels. In addition, as mentioned above, many undesirable behavioral outcomes, such as substance use, delinquency, teen pregnancy, and school failure, share common risk factors. Some risk factors, such as demographic characteristics, cannot be changed, but can help to identify high-risk groups. Identification of specific populations in which risk factors are high and protective factors are low allows identification of prevention needs and facilitates targeting programming toward the reduction of risk factors and the enhancement of protective factors (Hawkins, Arthur, &

Catalano, 1997). Risk and protective factors which were asked about on the survey (see appendix) are as follows.

**Community Factors:**

- ! **Low neighborhood attachment** (Items 95, 97,107)
- ! **Community disorganization** (Items 99[a-d], 105)
- ! **Transitions and mobility** (Items 101, 104, 106, 108,100)
- ! **Laws and norms favorable toward drug use** (Items 86, 88, 90, 93[a-c], 94[a-d])
- ! **Perceived availability of drugs and handguns** (Items 84, 85, 87, 89, 91)
- ! **Opportunities for conventional involvement** (Items 103[a-e])
- ! **Opportunities for positive interaction** (Item 98)
- ! **Rewards for conventional involvement** (Items 96, 102, 109)

**School Factors:**

- ! **Academic failure** (Items 13, 23)
- ! **Little commitment to school** (Items 25, 26, 27, 28[a-c])
- ! **School absenteeism** (Items 14[a-c])
- ! **Opportunities for positive involvement** (Items 15, 16, 18, 19, 25)
- ! **Rewards for conventional involvement** (Items 17, 20, 21, 22)

**Family Factors:**

- ! **Poor family management** (Items 111, 112, 113, 115, 124, 125)
- ! **Poor Discipline** (Items 114, 116, 117)
- ! **Parental attitudes favorable toward drug use** (Items 110[a-c])
- ! **Parental attitudes favorable toward antisocial behavior** (Items 110[d-f])
- ! **Attachment** (Items 120, 121)
- ! **Opportunities for positive involvement** (Items 119, 122, 123)
- ! **Rewards for conventional involvement** (Items 118, 126)

### **Peer-Individual Factors:**

- ! **Rebelliousness** (Items 32, 35, 47)
- ! **Early initiation of substance use** (Items 30[a-d])
- ! **Early initiation of problem behavior** (Items 30[e-i])
- ! **Impulsiveness** (Items 48, 49, 50, 51)
- ! **Antisocial behavior** (Items 40[a-h])
- ! **Attitudes favorable toward antisocial behavior** (Items 31[a-e])
- ! **Attitudes favorable toward drug use** (Items 31[f-i])
- ! **Perceived risks of drug use** (Items 52[a-d])
- ! **Interaction with antisocial peers** (Items 29[e-k])
- ! **Friends' use of drugs** (Items 29[a-d])
- ! **Sensation seeking** (Items 37[a-c])
- ! **Rewards for antisocial involvement** (Items 41[a-d])
- ! **Social skills** (Items 42, 43, 44, 45)
- ! **Belief in the moral order** (Items 33, 34, 36, 46)

## **3.2 Regional Findings**

### **3.2.1 Attitudes Favorable Toward Drug Use**

Nearly all public school students in the Upper Peninsula region reported that they thought it was very wrong or wrong for someone their age to take a handgun to school (**Exhibit 3.1**). Most reported that it was very wrong or wrong for someone their age to use illegal drugs other than marijuana (93%), attack someone (89%), steal anything worth more than \$5 (86%), smoke marijuana (81%), cut school (75%), smoke cigarettes (67%), drink alcohol regularly



**Exhibit 3.1 Students' Attitudes About Substance Use and Other Behaviors Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent			
	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
<b>How wrong do you think it is for someone your age to:</b>				
smoke cigarettes?	45.3	21.3	18.0	15.4
drink alcohol regularly?	44.9	20.3	21.7	13.2
smoke marijuana?	66.7	14.6	8.4	10.4
use other illegal drugs?	84.7	8.4	3.4	3.5
steal anything worth more than \$5?	48.9	36.8	12.1	+
pick a fight with someone?	22.6	39.6	30.6	7.3
cut school?	43.2	32.0	18.6	6.2
take a handgun to school?	91.1	7.0	+	+
attack someone to seriously hurt them?	61.1	27.8	8.7	+

+ Data suppressed due to low precision.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey

(65%), or pick a fight with someone (62%). Some students, however, reported that it was not wrong at all or only a little bit wrong for someone their age to engage in such activities.

Students also were asked how their parents felt about a subset of these behaviors. **Exhibit 3.2** shows that most students reported that their parents overwhelmingly thought each of these behaviors was wrong or very wrong. Nearly all students reported that their parents felt it was very wrong or wrong for them to steal anything worth more than \$5 or to smoke marijuana, and most reported that their parents felt it was very wrong or wrong for them to smoke cigarettes (89%), drink alcohol (85%), or pick a fight with someone (85%).

### **3.2.2 Perceived Availability of Drugs**

Students were asked how easy it would be for them to get alcohol, tobacco, and other drugs if they wanted to get some. **Exhibit 3.3** shows that only a minority of public school students in the Upper Peninsula region thought getting marijuana or other illegal drugs would be very easy or sort of easy. Cigarettes and alcohol, however, were thought to be easier to obtain. About 63 percent of students thought it would be very easy or sort of easy for them to get cigarettes, and 58 percent thought it would be very easy or sort of easy to get alcohol.

**Exhibit 3.2 Parental Attitudes Towards Substance Use and Other Behaviors Among School Students in the Upper Peninsula Region: 2000/2001**

	Percent			
	Very Wrong	Wrong	A Little Bit Wrong	Not Wrong at All
<b>How wrong do your parents feel it would be for you to:</b>				
smoke cigarettes?	72.6	16.5	7.3	3.6
drink alcohol?	62.5	22.7	10.8	4.0
smoke marijuana?	88.7	6.9	2.8	+
steal anything worth more than \$5?	83.5	13.6	+	+
pick a fight with someone?	56.5	28.3	12.4	2.8

+ Data suppressed due to low precision.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 3.3 Perceived Ease of Getting Tobacco, Alcohol, and Illicit Drugs Among Public School Students in the Upper Peninsula Region: 2000/2001**

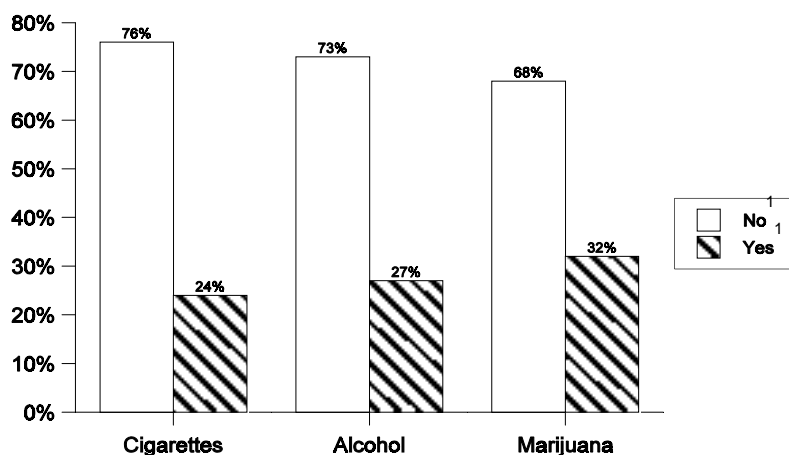
	Percent			
	Very Hard	Sort of Hard	Sort of Easy	Very Easy
<b>If you wanted to get _____, how easy would it be for you to get some?</b>				
beer, wine, or hard liquor	26.1	15.5	27.2	31.2
cigarettes	25.1	11.5	16.7	46.7
marijuana	42.5	14.8	16.3	26.5
other illegal drugs	58.2	22.3	13.9	5.6

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

Students also were asked about the likelihood of an adolescent in their neighborhood getting caught by the police for using various substances. About 76 percent of Upper Peninsula region students believed it was unlikely that an adolescent in their neighborhood would get caught if they smoked cigarettes. Students also thought it was unlikely that an adolescent would get caught for drinking alcohol (73%) or smoking marijuana (68%) (**Exhibit 3.4**).

### **Exhibit 3.4 Perceived Likelihood of Getting Caught by the Police for Substance Use Among Public School Students in the Upper Peninsula Region: 2000/2001**

<sup>1</sup>Students were asked to select one of the four response options: *NO!*, *no*, *yes*, and *YES!*. For this report, the response options of



*NO!* and *no* were collapsed into No; *YES!* and *yes* were collapsed into Yes.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

### **3.2.3 Perceived Risks of Drug Use**

Even though many students thought it was fairly easy to get substances and unlikely that they would get caught for using alcohol, tobacco, or other drugs, many also felt that substance use was dangerous. **Exhibit 3.5** indicates that more than half felt that people are at great risk for harming themselves physically or in other ways if they smoke marijuana regularly (70%) or smoke one or more packs of cigarettes per day (66%). Only 35 percent thought drinking alcohol nearly every day was a great risk, and only 28 percent thought there was great risk associated with smoking marijuana once or twice.

### **3.2.4 Friends' Use of Drugs**

Students were asked to think about their four best friends (the friends they felt closest to) and indicate how many had used alcohol, tobacco, or other drugs in the past year (**Exhibit 3.6**). A majority of students reported that none of their best or closest friends had used marijuana or other illegal drugs in the past year. Approximately 59 percent had 1 or more best

**Exhibit 3.5 Perceived Risks of Substance Use Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent			
	No Risk	Slight Risk	Moderate Risk	Great Risk
<b>How much do you think people risk harming themselves (physically or in other ways) if they:</b>				
Smoke one or more packs of cigarettes per day?	2.8	6.1	25.4	65.7
Try marijuana once or twice?	18.3	27.9	26.2	27.7
Smoke marijuana regularly?	6.1	8.1	16.3	69.5
Take one or two drinks of an alcoholic beverage nearly every day?	9.6	20.1	35.3	35.1

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 3.6 Friends' Substance Use Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent				
	None	1	2	3	4
<b>Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have:</b>					
Smoked cigarettes?	49.9	13.0	11.6	7.7	17.9
Tried alcohol when parents didn't know about it?	41.4	11.0	10.8	8.6	28.2
Used marijuana?	65.7	11.2	7.1	5.2	10.9
Used LSD, cocaine, amphetamines, or other illegal drugs?	86.1	6.6	2.6	+	3.2

+ Data suppressed due to low precision.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

or close friends who had tried alcohol when their parents didn't know about it, and 50 percent had best or close friends who had smoked cigarettes in the past year.

### 3.2.5 Opportunities and Rewards for Positive School, Community, and Family Involvement

Students were asked about opportunities and rewards for positive school, community, and family involvement. **Exhibit 3.7** shows that most students reported that there are a lot of chances for students to get involved in school sports, clubs, and other activities outside of class (89%), they have lots of chances to be part of class discussions/activities (80%), there are lots of chances for students to talk with a teacher one-on-one (70%), teachers ask them to work on school projects (69%), and teachers tell them when they are doing a good job (67%). Only 49 percent, however, reported that they have lots of chances to help decide things like class activities and rules, 44 percent reported that their teachers praise them when they work hard in school, and 39 percent reported that the school lets their parents know when they have done something well.

**Exhibit 3.7 Opportunities and Rewards for School Involvement Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent	
	No <sup>1</sup>	Yes <sup>1</sup>
In my school, students have lots of chances to help decide things like class activities and rules.	50.8	49.3
Teachers ask me to work on classroom projects.	31.3	68.7
My teacher(s) notices when I am doing a good job and lets me know about it.	33.3	66.7
There are a lot of chances for students in my school to get involved in sports, clubs, and other schools activities outside of class.	11.3	88.7
There are lots of chances for students in my school to talk with a teacher one-on-one.	29.8	70.2
The school lets my parents know when I have done something well.	61.3	38.7
My teachers praise me when I work hard in school.	55.6	44.4
I have lots of chances to be part of class discussions/activities.	19.9	80.1

<sup>1</sup>Students were asked to select one of the four response options: *NO!*, *no*, *yes*, and *YES!*. For this report, the response options of *NO!* and *no* were collapsed into No; *YES!* and *yes* were collapsed into Yes.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

Students also were asked about the kinds of activities available in their community for people their age and about interaction between students and the community. **Exhibit 3.8** shows that

- ! students reported that the most common community activity is sports teams (94%), followed by 4-H clubs (77%), scouting (73%), boys and girls clubs (67%), and service clubs (58%);
- ! 62 percent of students said that there are people in their neighborhood who encourage them to do their best, 59 percent said that there are people in their neighborhood who are proud of them when they do something well, and 45 percent said there are a lot of adults in their neighborhood they could talk to about something important; and
- ! 30 percent of students said their neighbors notice when they do a good job and let them know about it.

**Exhibit 3.8 Community Involvement and Interaction Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent	
	No	Yes
<b>Which of the following activities for people your age are available in your community?</b>		
Sports teams	6.1	93.9
Scouting	26.6	73.4
Boys and girls clubs	32.9	67.1
4-H clubs	22.6	77.4
Service clubs	42.0	58.0
<b>In my neighborhood, or the area around where I live:<sup>1</sup></b>		
There are a lot of adults I could talk to about something important.	55.5	44.5
There are people who are proud of me when I do something well.	40.8	59.2
There are people who encourage me to do my best.	38.4	61.6
<b>My neighbors notice when I am doing a good job and let me know about it.<sup>1</sup></b>		
	69.8	30.2

<sup>1</sup>Students were asked to select one of the four response options: *NO!*, *no*, *yes*, and *YES!*. For this report, the response options of *NO!* and *no* were collapsed into No; *YES!* and *yes* were collapsed into Yes.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

Finally, students were asked about rewards and opportunities for family involvement. Approximately 41 percent of students reported that their parents notice all the time when they are doing a good job and let them know about it, and another 29 percent reported that their parents do so often. Thirty-six percent of students also said that their parents tell them all the time that they are proud of them for something they have done, and 33 percent said that their parents do so often (**Exhibit 3.9**). **Exhibit 3.10** shows that 79 percent of students said they could ask their parents for help with a personal problem, 75 percent of students reported that their parents give them lots of chances to do fun things with them, and 68 percent are involved in family decisions affecting them.

**Exhibit 3.9 Rewards for Family Involvement Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent			
	Never or almost never	Sometimes	Often	All the time
My parents notice when I am doing a good job and let me know about it.	4.7	25.2	29.3	40.9
How often do your parents tell you that they are proud of you for something you have done?	7.0	24.1	33.2	35.7

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 3.10 Opportunities for Family Involvement Among Public School Students in the Upper Peninsula Region: 2000/2001**

	Percent	
	No <sup>1</sup>	Yes <sup>1</sup>
My parents ask me what I think before most family decisions affecting me are made.	31.7	68.3
If I had a personal problem, I could ask my mom or dad for help.	20.6	79.4
My parents give me lots of chances to do fun things with them.	25.6	74.5

<sup>1</sup>Students were asked to select one of the four response options: *NO!*, *no*, *yes*, and *YES!*. For this report, the response options of *NO!* and *no* were collapsed into No; *YES!* and *yes* were collapsed into Yes.

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

### 3.2.6 Regional and Statewide Rankings of Risk and Protective Factors

**Exhibit 3.11** shows rankings of ten risk factors and nine protective factors for the Upper Peninsula region, as well as the percentage of students who are considered “at risk” or “resilient” for each. The most common risk factor for students in the Upper Peninsula region was perceived availability of drugs and handguns, on which 45 percent of students were at risk. Other relatively common risk factors for Upper Peninsula region students included little commitment to school (31%) and sensation seeking (30%). About one quarter were at risk on academic failure, poor family discipline, and rebelliousness. Somewhat fewer were at risk on friends’ substance use (21%), low neighborhood attachment (18%), laws and norms favorable toward substance use (18%), and attitudes favorable toward substance use (16%). An examination of protective factors shows that more than three quarters of Upper Peninsula region students were resilient on family attachment, opportunities for conventional community involvement, opportunities for positive school involvement, and opportunities for positive family involvement. About seven in ten were resilient on belief in the moral order and social skills, and over half were resilient on rewards for conventional involvement with the family (66%) and community (52%). Just under half were resilient on rewards for conventional school involvement.

Statewide rankings and percentages are presented in **Exhibit 3.12**. Across the state, the most common risk factor was the perceived availability of drugs and handguns. More than four in ten students were at risk on this factor. Little commitment to school, poor family discipline, and sensation seeking were risk factors for about a quarter of students statewide. About one in five students were at risk on the factors academic failure, rebelliousness, friend’s substance use, laws and norms favorable toward substance use, and low neighborhood attachment. The tenth most common risk factor for students across the state was perceived risks of substance use (14%). In terms of protective factors, many students across the state were resilient on opportunities for positive involvement at school (83%), attachment to their family (79%), and opportunities for positive family involvement in their family (78%). About three quarters were resilient on social skills, belief in the moral order, and opportunities of conventional involvement in the community. Two-thirds were resilient on rewards for conventional family involvement, and more than half on rewards for conventional community and school involvement.



**Exhibit 3.11 Rank of Risk and Protective Factors Among Michigan Public School Students: 2000/2001**

Upper Peninsula Region					
Rank	Risk Factor	Percentage of Students at Risk	Rank	Protective Factor	Percentage of Students Resilient
1	Perceived availability of drugs and handguns	44.8%	1	Attachment (family)	79.9%
2	Little commitment to school	31.0	2	Opportunities for conventional involvement (community)	79.0
3	Sensation seeking	30.1	3	Opportunities for positive involvement (school)	77.4
4	Academic failure	25.9	4	Opportunities for positive involvement (family)	75.7
5	Poor discipline (family)	25.7	5	Belief in the moral order	71.1
6	Rebelliousness	22.5	6	Social skills	69.1
7	Friends' substance use	20.5	7	Rewards for conventional involvement (family)	65.8
8	Low neighborhood attachment	18.3	8	Rewards for conventional involvement (community)	51.5
9	Laws and norms favorable toward substance use	17.5	9	Rewards for conventional involvement (school)	49.3
10	Attitudes favorable toward substance use	16.3			

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

**Exhibit 3.12 Rank of Risk and Protective Factors Among Michigan Public School Students: 2000/2001**

Statewide					
Rank	Risk Factor	Percentage of Students at Risk	Rank	Protective Factor	Percentage of Students Resilient
1	Perceived availability of drugs & handguns	42.5%	1	Opportunities for positive involvement (school)	82.5%
2	Little commitment to school	26.6	2	Attachment (family)	79.3
3	Poor discipline (family)	25.9	3	Opportunities for positive involvement (family)	77.7
4	Sensation seeking	22.9	4	Social skills	74.4
5	Academic failure	20.7	5	Belief in the moral order	73.0
6	Rebelliousness	19.3	6	Opportunities for conventional involvement (community)	72.1
7	Friends' substance use	18.7	7	Rewards for conventional involvement (family)	67.0
8	Laws and norms favorable toward substance use	17.6	8	Rewards for conventional involvement (community)	53.5
9	Low neighborhood attachment	16.7	9	Rewards for conventional involvement (school)	52.7
10	Perceived risks of substance use	13.7			

Source: Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey.

## 4. SUMMARY AND IMPLICATIONS

Findings from this study have implications for substance abuse prevention policies, planning, and program development in the Upper Peninsula region of Michigan. This study was designed to identify adolescent populations in greatest need of substance abuse prevention so that prevention programs and services can target risk and protective factors for substance abuse. Even though some of the risk factors examined in this study (e.g., grade in school, gender, and race/ethnicity) are impossible to alter, they do serve to identify those students with elevated risk for substance use. Other risk factors can be modified. Modifiable risk factors include academic performance, antisocial behaviors, student perceptions, and availability of alcohol, tobacco, and other drugs. The same is true for protective factors; some are amenable to change and others can serve as markers of groups most at risk. Highlights of the findings of this study and implications regarding programming are provided in the following sections.

### 4.1 Summary

#### 4.1.1 Substance Use

When compared to students across the state, students in the Upper Peninsula region reported slightly higher levels of alcohol, tobacco, and recent illicit drug use, and similar levels of lifetime illicit drug use.

- ! More than one third of public school students in the Upper Peninsula region reported recent alcohol use.
- ! Almost one quarter reported recent tobacco use.
- ! Nearly one in five students reported recent marijuana use.

#### *Substance use varied across some demographic characteristics.*

- ! In general, lifetime and past month substance use was higher among non-Caucasian, non-African-American students than among Caucasian students.
- ! Higher grade levels were associated with an increased prevalence of substance use. For example, the prevalence of past month alcohol use was 37 percent among 8<sup>th</sup> graders, 47 percent among 10<sup>th</sup> graders, and 56 percent among 12<sup>th</sup> graders.

#### 4.1.2 Delinquent Behaviors

*Males were more likely than females to exhibit some, but not all, delinquent behaviors.*

- ! About 14 percent of students in the Upper Peninsula region reported having been drunk or high at school in the year prior to the survey. This behavior was more common among males than females, and more common among seniors and sophomores than among 8<sup>th</sup> graders.
- 1.6 One in ten students had been suspended from school. More males than females had been suspended.
- 1.7 Theft or attempted theft of a motor vehicle was rare.
- 1.8 Six percent of students had sold illegal drugs. Although the differences were relatively minor, more males than females and more seniors than sophomores reported this behavior.
- 1.9 About one in twenty students had been arrested in the year before the survey.

#### 4.1.3 Risk and Protective Factors

One way to reduce students' substance use and delinquent behavior is to identify factors that make students more or less likely to participate in such behaviors and then reduce risk factors while increasing protective factors. National research has identified a set of risk and protective factors that have been shown to be related to these undesirable behaviors (Hawkins et al., 1992, 1997). The more risk factors a student has, the more likely that student is to have used substances in the past month. The more protective factors present, the less likely that student is to have used substances in the past month.

The following findings report on the status of risk and protective factors among students in the Upper Peninsula region.

- ! **Students' Attitudes Toward Drug Use and Antisocial Behavior.** The majority of students reported that it was "very wrong" or "wrong" for someone their age to engage in substance use and delinquent behavior. For example, over 90 percent thought it was very wrong or wrong for someone their age to take a handgun to school or to use illegal drugs other than marijuana.
- ! **Parents' Attitudes Toward Drug Use and Antisocial Behavior.** Students overwhelmingly reported that their parents thought substance use and delinquent behavior were wrong or very wrong for adolescents.

- ! **Perceived Availability of Drugs.** Although students reported that marijuana or other illicit drugs would be difficult to obtain, they thought it would be easier to get alcohol or cigarettes. Students also reported that it was unlikely that an adolescent in their neighborhood would get caught by the police if they smoked cigarettes or marijuana, or drank alcohol.
- ! **Perceived Risks of Drug Use.** Perceived risk of physical or other harm was fairly high for heavy smoking and regular marijuana use. Fewer students, however, thought using alcohol regularly or smoking marijuana once or twice put them at great risk.
- ! **Friends' Use of Drugs.** A majority of students reported that none of their closest friends had used or marijuana or other illegal drugs in the past year. At least half, however, indicated that at least one close friend had smoked cigarettes or tried alcohol when their parents didn't know about it.
- ! **Opportunities and Rewards for Positive School Involvement.** Many students in the Upper Peninsula region reported that there are a lot of opportunities to be involved and rewarded at school. Fewer than half, however, said that they can help decide class activities and rules, that their teachers praise them when they work hard, or that the school notifies their parents when they have done something well.
- ! **Opportunities and Rewards for Positive Community Involvement.** Opportunities to participate in community activities such as sports, scouting, and service clubs were commonly reported by Upper Peninsula region students. More than half of students reported that their neighbors encourage them and are proud of them when they do something well, but it was less common to have neighborhood adults to confide in, or neighbors that notice and are proud when they do a good job.
- ! **Opportunities and Rewards for Positive Family Involvement.** About seven in ten students in the Upper Peninsula region reported that their parents always or often notice when they are doing a good job and let them know about it, and that their parents always or often tell them that they are proud of them for something they have done. Most students indicated that they could ask their parents for help with a personal problem, that their parents give them the opportunity to do fun things with them, and that they are involved in family decisions affecting them.

## 4.2 Limitations of the Data

It is important to note again the limitations of the data gathered in the Michigan Substance Abuse Risk and Protective Factors 2000/2001 Student Survey. The primary limitation is the exclusive focus on adolescents in school. With such a focus, adolescent subpopulations with concentrated numbers of problem users may be missed. These subpopulations include

school dropouts, homeless and runaway students, and students who have been incarcerated or institutionalized—all of whom are likely to be undercounted by school surveys.

The subpopulation of most concern not captured by school-based surveys is school dropouts. There has been some controversy surrounding the belief that dropouts have the greatest drug problems, but most of the research to date has shown that dropouts are more likely to be substance users than those who remain in school. Mensch and Kandel (1988) found that dropouts were more likely than graduates to use cigarettes and illicit drugs. An unpublished analysis of the adolescent subsample of the 1991 National Household Survey on Drug Abuse (NHSDA) also showed that 16- and 17-year-old dropouts were significantly more likely than those currently enrolled to use alcohol, cigarettes, marijuana, cocaine, and any illicit drugs (including marijuana and cocaine). Published studies have also shown that drug use often precedes dropping out of school (Friedman, Glickman, & Utada, 1985; Mensch & Kandel, 1988), but drug use has not been proven to be a definitive cause of dropping out of school. Nevertheless, it is reasonable to assume that some of the problem users who are *at risk* for dropping out but have not yet done so will be captured in this survey; results, however, can only be generalized to the population of adolescents who are attending school.

The second important limitation is that the questionnaire measures self-reported behavior. Caution should be exercised in interpreting these data because of respondents' tendencies to underreport undesirable behaviors and to have difficulty remembering complicated information, such as the age at which they first used a substance (Bailey, Flewelling, & Rachal, 1992).

Finally, reliable estimates for some demographic subgroups consistently were unavailable for the Upper Peninsula region because the groups were small relative to the entire student population or because the use or behavior in question was very low in these groups. Although data from these groups were used to calculate other estimates, such as regional totals and gender estimates, it is not possible to compare them with other demographic subgroups.

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**APPENDIX A**  
**Data Collection Materials**



